

REMARKS/ARGUMENTS

Claims 1 and 11 are currently amended. Claims 1-18 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Claims 1, 3-5, 8-11, 14-15 and 17-18 were rejected as being anticipated by US 2005/0052465 (Moore). This rejection is respectfully traversed.

Independent claims 1 and 11 of the present application are directed to a keyboard video mouse (KVM) switch and a computer switching method, respectively. Claims 1 and 11 are amended to more clearly define the subject matter of the invention. First, claim 1 is amended to require that the “local electrical signals from different first interfaces are for manipulating different local or remote computers.” Similarly, claim 11 is amended to require that “local electrical signals from different local manipulating devices are for manipulating different local or remote computers.” These claim amendments are supported by the specification; for example, see page 4, lines 11-18 and Figs. 1 and 2. From the specification and drawings, it is clear that each first interface 114 is intended to connect to a set of I/O devices for manipulating one computer at a time. The set of I/O devices typically includes a keyboard, a mouse, and a monitor, but the claim language “manipulating device” is intended to broadly cover a set of I/O devices that may include, for example, a keyboard but no mouse, or other types of physical devices. The claimed invention is intended for a system where multiple sets of I/O devices (e.g. multiple sets of keyboard/mouse/monitor) are connected to the KVM switch so that they can communicate with multiple local or remote computers simultaneously. However, the applicant recognizes that the original claim language could be broadly read so that, for example, a PS/2 interface connecting to a mouse and a PS/2 interface connecting to a keyboard can be considered “a plurality of first interfaces” even though the mouse and the keyboard are in fact one set of I/O devices intended to communicate with the same computer. The Examiner seems to have taken this view, as he stated that Moore’s KVM switch comprises “a plurality of first interfaces (Moore; Figure 2 Items PS2), which connect to the local manipulating devices (Moore; Figure 2 Items 118 and 120).” (See the Office Action, page 3, lines 3-4.) Clearly, in Moore’s Fig. 2, items 118 (keyboard) and 120 (mouse) belong to one set of I/O devices intended to communicate with one computer at a time. Accordingly, the applicant amends claims 1 and 11 to exclude such a reading.

The cited Moore reference fails to teach or suggest the above-quoted elements of claims 1 and 11. Moore describes a KVM system including a local unit 116 and a remote unit 126 which communicate with each other using a wireless network. Moore mentions that the system may have multiple remote units simultaneously receiving broadcast transmissions from one local unit (paragraphs 0134), but he does not teach or suggest multiple sets of I/O devices (e.g. keyboard/mouse/monitor combinations) connected to the local unit 116.

Second, claim 1 is amended to recite that at least one network packet generated by the packet encoding device has “a plurality of data sections, at least some data sections of a same network packet corresponding to the local electrical signals received by different ones of the first interfaces.” Similarly, claim 11 is amended to recite generating “at least one network packet having a plurality of data sections ... at least some data sections of a same network packet corresponding to the local electrical signals received from different ones of the plurality of local manipulating devices.” These claim amendments are supported by the specification, for example, at page 7, second and fourth full paragraphs, and Fig. 3. As described in the present specification, one of the problems associated with conventional KVM switches is that when several manipulating devices simultaneously access multiple computers, the signal of each operation device has to be sent out in order. (See the specification at page 1, last two lines.) By generating network packets, where data sections of the same network packet contain local electrical signals received from different local manipulating devices, and transmitting such network packets other KVM switches, the KVM switch prevents the problem of signal delay as in the conventional art due to sorting and waiting. (See the specification at page 7, last full paragraph.)

The cited Moore reference fails to teach or suggest the above-quoted elements of claims 1 and 11. Moore does not teach or suggest any network packet that contains data sections corresponding to local electrical signals from different ones of the first interfaces (i.e. different sets of I/O devices). Moore describes the data packet format (see Fig. 9, paragraphs [0066], paragraphs [0089] to [0108]), but all data in the data packets are from the same set of I/O devices. Further, the packets described in Moore are only for transmitting video signals, while the packet claimed in claims 1 and 11 contain data sections “corresponding to the local electrical signals” that are received from local manipulating devices. Accordingly, Moore fails to teach or suggest “a plurality of data sections, at least some data sections of a same network packet

corresponding to the local electrical signals received by different ones of the first interfaces” as required by claim 1 and “at least one network packet having a plurality of data sections ... at least some data sections of a same network packet corresponding to the local electrical signals received from different ones of the plurality of local manipulating devices” as required by claim 11.

In addition, Moore fails to teach or suggest the “plurality of second interfaces adapted for connecting to the local computers” elements of claims 1 and the “transmitting the remote electrical signals to the local computers of their destinations” element of claim 11. In Moore, the local unit 116 is only connected to one local computer (“target computer”) 102; likewise, the remote unit 126 is only connected to one remote computer 104. This difference stems from the fact that the local unit and remote unit in Moore are not KVM switches each “for a plurality of local and remote computers to share a plurality of local manipulating devices” as recited in claims 1 and 11.

For the above reasons, claims 1 and 11, as well as their dependent claims 3-5, 8-10, 14-15 and 17-18 are patentable over Moore.

Claims 2 and 12 were rejected as being obvious over Moore in view of US 6567896 (Shirley). Claims 6-7 and 16 were rejected as being obvious over Moore in view of the Examiner’s Official Notice. These rejections are respectfully traversed.

The deficiencies of Moore with respect to independent claims 1 and 11 are discussed earlier. The Shirley reference and the official notice do not cure this deficiency. For example, Shirley was cited for teaching a KVM switch that communicated using packets and the packets have a header section. The portion of Shirley relied on by the Examiner describes a header in the packet to identify the recipient of the communication. The official notice was relied on for teaching UARTs and half-duplex processor. Thus, the cited reference, taking in combination, does not teach or suggest the elements of claims 1 and 11 quoted above. Accordingly, claims 2, 12, 6-7 and 16, which depend from claims 1 or 11, are patentable over the cited references.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call the undersigned attorney at the Los Angeles, California telephone

number (213) 625-5076 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response or deficient in fees, please charge the fees to our Deposit Account No. 50-3531.

Respectfully submitted,

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